EXHIBIT A

1. (twice amended) A method of shared flow control of data between a transport layer interface provider and at least one application comprising the steps of:

receiving from the at least one application a stream of data having a first aggregate downstream data rate, wherein the stream of data is made up of a plurality of streams of data;

measuring the first aggregate downstream data rate of the stream of data;

transmitting the stream of data to the transport layer interface provider; and

throttling, independent of the at least one application and the transport layer interface provider, the stream of data from the first aggregate downstream data rate to a second aggregate downstream data rate without rejecting the stream of data.

2. (original) The method of claim 1 in which the step of measuring further comprises the step of counting with an aggregate downstream counter an amount of received data from the stream of data.

3. (original) The method of claim 2 in which the step of counting further comprises the steps of incrementing the aggregate downstream counter by the amount of received data, and decrementing the aggregate downstream counter by a predetermined amount at a predetermined interval of time.

4. (original) The method of claim 2 in which the step of throttling further comprises the steps of comparing the aggregate downstream counter to a predetermined downstream aggregate threshold, and notifying the transport layer interface provider to throttle the plurality of streams of data.

5. (original) The method of claim 1 in which the step of measuring further comprises the steps of identifying an individual downstream stream of data from the plurality of streams of data, and counting from the individual downstream stream of data an individual amount of received data with an individual downstream counter associated with the individual downstream stream of data.

6. (original) The method of claim 5 in which the step of counting further comprises the steps of incrementing the individual downstream counter by the individual amount of received data, and decrementing the individual downstream counter by a predetermined individual amount at a predetermined interval of time.

7. (original) The method of claim 5 in which the step of measuring further comprises the step of comparing the individual downstream counter to a predetermined individual downstream threshold.

8. (original) The method of claim 1 in which the step of throttling further comprises the step of executing UNIX stream functions to throttle the stream of data.

9. (twice amended) A method of shared flow control of data between a transport layer interface provider and at least one application comprising the steps of:

receiving from the transport layer interface provider a stream of data having a first aggregate upstream data rate, wherein the stream of data is made up of a plurality of streams of data;

measuring the first aggregate upstream data rate of the stream of data;

transmitting the stream of data to the at least one application; and

throttling, independent of the at least one application and the transport layer interface provider, the stream of data from the first aggregate upstream data rate to a second aggregate upstream data rate without rejecting the stream of data.

10. (original) The method of claim 9 in which the step of measuring further comprises the step of counting with an aggregate upstream counter an amount of received data from the stream of data.

11. (original) The method of claim 10 in which the step of counting further comprises the steps of incrementing the aggregate upstream counter by the amount of received data, and decrementing the aggregate upstream counter by a predetermined amount at a predetermined interval of time.

12. (original) The method of claim 10 in which the step of throttling further comprises the steps of comparing the aggregate upstream counter to a predetermined

downstream aggregate threshold, and notifying the transport layer interface provider to throttle the plurality of streams of data.

13. (original) The method of claim 9 in which the step of measuring further comprises the steps of identifying an individual upstream stream of data from the plurality of streams of data, and counting from the individual upstream stream of data an individual amount of received data with an individual upstream counter associated with the individual upstream stream of data.

14. (original) The method of claim 13 in which the step of counting further comprises the steps of incrementing the individual upstream counter by the individual amount of received data, and decrementing the individual upstream counter by a predetermined individual amount at a predetermined interval of time.

15. (original) The method of claim 13 in which the step of measuring further comprises the step of comparing the individual upstream counter to a predetermined upstream individual threshold.

16. (original) The method of claim 9 in which the step of throttling further comprises the step of executing UNIX stream functions to throttle the stream of data.

17. (twice amended) A computer-readable signal bearing medium having computer-readable program code means embodied therein for shared data flow control of data, the computer-readable program code, comprising:

means having computer-readable program code for receiving from at least one application a stream of data having a first aggregate downstream data rate, wherein the stream of data is made up of a plurality of streams of data,

means having computer-readable program code for measuring the first aggregate downstream data rate of the stream of data,

means having computer-readable program code for transmitting the stream of data to a transport layer interface provider, and

means having computer-readable program code for throttling, independent of the at least one application and the transport layer interface provider, the stream of data from the first aggregate downstream data rate to a second aggregate downstream data rate without rejecting the stream of data.

18. (original) The computer-readable signal-bearing medium of claim 17 further comprising means having computer-readable program code for counting with an aggregate downstream counter an amount of received data from the stream of data.

19. (original) The computer-readable signal-bearing medium of claim 18 further comprising means having computer-readable program code for incrementing the aggregate downstream counter by the amount of received data, and means having computer-readable

program code for decrementing the aggregate downstream counter by a predetermined amount at a predetermined interval of time.

20. (original) A computer-readable signal-bearing medium of claim 17 further comprising means having computer-readable program code for comparing the aggregate downstream counter to a predetermined downstream aggregate threshold, and means having computer-readable program code for notifying the transport layer interface provider to throttle the plurality of streams of data.

21. (twice amended) A computer-readable signal bearing medium having computer-readable program code means embodied therein for shared data flow control of data, the computer-readable program code, comprising:

means having computer-readable program code for receiving from a transport layer interface provider a stream of data having a first aggregate upstream data rate, wherein the stream of data is made up of a plurality of streams of data,

means having computer-readable program code for measuring the first aggregate upstream data rate of the stream of data,

means having computer-readable program code for transmitting the stream of data to at least one application, and

means having computer-readable program code for throttling, independent of the at least one application and the transport layer interface provider, the stream of data from the first aggregate upstream data rate to a second aggregate upstream data rate without rejecting the stream of data.

22. (original) The computer-readable signal-bearing medium of claim 21 further comprising means having computer-readable program code for counting with an aggregate upstream counter an amount of received data from the stream of data.

23. (original) The computer-readable signal-bearing medium of claim 22 further comprising means having computer-readable program code for incrementing the aggregate upstream counter by the amount of received data, and means having computer-readable program

code for decrementing the aggregate upstream counter by a predetermined amount at a predetermined interval of time.

24. (original) A computer-readable signal-bearing medium of claim 21 further comprising means having computer-readable program code for comparing the aggregate upstream counter to a predetermined downstream aggregate threshold, and means having computer-readable program code for notifying the transport layer interface provider to throttle the plurality of streams of data.

25. (canceled) An apparatus having an aggregate stream of data at a first data rate between at least one application process and a network, comprising:

a flow control module having an aggregate counter to count the an amount of received data from the stream of data, wherein the aggregate counter is decremented by a predetermined amount at a predetermined intervals of time; and

a transport layer provider coupled to the flow control module for receiving the aggregate stream of data and modifying the first data rate of the aggregate stream of data in response to a signal from the flow control module in response the comparison of the aggregate counter to an aggregate threshold.

26. (canceled) The apparatus of claim 25 in which the flow control module further comprises an individual data rate counter associated with an individual stream of data from the aggregate stream of data, wherein the individual data rate counter calculates an individual data

rate for the individual stream of data, and a comparator that compares the individual counter to a predetermined individual data rate.

27. (previously presented)A method of shared flow control of data streams, flowing in both

upstream and downstream directions, between a transport layer interface provider and at least one application, comprising the steps of:

passing a plurality of data streams through a flow control module that is located between the at least one application and the provider, an aggregate data stream being formed by the plurality of data streams;

calculating, in the flow control module that has upstream and downstream aggregate counters, an aggregate data rate for the aggregate data stream from the plurality of data streams in a respective one of the upstream and downstream directions;

comparing, in the flow control module that has a comparator, at least one of the upstream and downstream aggregate counters to the aggregate data rate threshold to determine if the aggregate data rate threshold has been exceeded by the aggregate data rate of the aggregate data stream; and

throttling, if the aggregate data rate threshold has been exceeded by the aggregate data rate of the aggregate data stream and independent of the at least one application and the provider, all of the data streams in the plurality of data streams from the aggregate data rate to another aggregate data rate without rejecting the plurality of data streams.

28. (once amended) The method of claim 1, wherein the method further comprises:

calculating, in the flow control module that has upstream and downstream individual counters, a respective individual data rate for each data stream in the plurality of data streams;

comparing, in the flow control module, at least one of the upstream and downstream individual counters to the respective individual data rate threshold to determine if the respective individual data rate threshold has been exceeded by the respective individual data rate of a respective data stream of the plurality of data streams; and

throttling, if the respective individual data rate threshold has been exceeded by the respective individual data rate and independent of at least one application and a provider, the respective individual data stream from the respective individual data rate to a further individual data rate without rejecting the plurality of data streams.

29. (previously presented) A method of shared flow control of data streams, flowing in both upstream and downstream directions, between a transport layer interface provider and at least one application, comprising the steps of:

passing a plurality of data streams through a flow control module that is located between the at least one application and the provider, an aggregate data stream being formed by the plurality of data streams;

calculating, in the flow control module that has upstream and downstream aggregate counters, an aggregate data rate for the aggregate data stream from the plurality of data streams in a respective one of the upstream and downstream directions;

calculating, in the flow control module that has upstream and downstream individual counters, a respective individual data rate for each data stream in the plurality of data streams;

comparing, in the flow control module that has a comparator, at least one of the upstream and downstream aggregate counters to the aggregate data rate threshold to determine if the aggregate data rate threshold has been exceeded by the aggregate data rate of the aggregate data stream;

comparing, in the flow control module, at least one of the upstream and downstream individual counters to the respective individual data rate threshold to determine if the respective individual data rate threshold has been exceeded by the respective individual data rate of a respective data stream of the plurality of data streams;

throttling, if the aggregate data rate threshold has been exceeded by the aggregate data rate and independent of the at least one application and the provider, all of the data streams in the plurality of data streams from the aggregate data rate to another aggregate data rate without rejecting the plurality of data streams; and

throttling, if the respective individual data rate threshold has been exceeded by the respective individual data rate and independent of the at least one application and the provider, the respective individual data stream from the respective individual data rate to a further individual data rate without rejecting the plurality of data streams;

wherein, when the aggregate data rate threshold is no longer exceeded by the aggregate data rate, then the throttling of the data stream ceases, provided the individual data rate threshold is not exceeded, and

wherein the respective individual data stream is unthrottled once the respective individual data rate for the individual data stream no longer exceeds the individual data rate threshold.